

EXHIBIT D

'049 Patent	Claim Elements	NCT's Mapping	Inadequacies of NCT's Claim Chart
Claim 1	<p>In a network of digital computers that includes a first plurality of Network Distributed Cache ("NDC") sites, each NDC site including an NDC that has an NDC buffer, a method for projecting images of a stored dataset from an NDC server terminator site into a second plurality of NDC client terminator sites in response to requests to concurrently access such stored dataset transmitted from a third plurality of client sites respectively to the second plurality of NDC client terminator sites, the method comprising the steps of:</p>	<p>CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c).</p> <p>CacheFlow 6000 accelerators are combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers- such as Akamai. Operation of the CacheFlow 6000 accelerator by CacheFlow's customers in their networks performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423- comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators, such as CacheFlow 6000 accelerators. Each CacheFlow</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including: A first plurality of NDC sites including an NDC that has an NDC buffer. NCT alleges that a CA 6000 is an NDC site. NCT has not identified any structure within the CA 6000 that is an NDC, nor has NCT identified any structure that is an NDC buffer.</p> <p>NCT alleges that CacheFlow software and hardware create an NDC, but fail to identify with any specificity what hardware and what software within the CacheOS constitute an NDC.</p> <p>The preamble, requires the NDC client terminator to be in a network with an ND Server Terminator Site. However, NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The CA 6000 never stores the "stored data" that is always on the web server. Thus, the accused product can never be used in the network claimed in the asserted claim.</p> <p>NCT conveniently ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p>

		<p>6000 accelerator includes a processor and a memory (See CF 007485) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007482 -CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a CacheFlow 6000 accelerator receiving a request for data, if the accelerator's buffers have such data, the accelerator transmits the requested data back to the computer-client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the ! CacheFlow 6000 accelerator do not have the requested data, the accelerator accesses such data and receives a copy (i.e., projected image) of the data from an accelerator acting as an NDC server terminator site. After obtaining a copy of the requested data, the shared cache can subsequently transmit the data to</p>	<p>NCT misrepresents what the documents relied on state: CF007485 does not provide a description of a processor or memory within a CA 6000.</p> <p>CF007482-5 does not show the memory of the CA 6000 being allocated as a cache.</p>
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		<p>one or more computers within the network (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000 Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies....</p> <p>"The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CFOO9223.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically. "CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return</p>	
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		<p>the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched performance, manageability, and scalability." CF 007484</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p>	
	(a) the NDC receiving the request to access data in the stored dataset;	<p>The shared cache (NDC) of the CacheFlow 6000 accelerator acting as a client accelerator (NDC client terminator site) receives a request to access data in a stored dataset.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™</p>	<p>NCT has not identified the structure of an NDC within the CA 6000.</p> <p>NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base their mapping on, clearly shows that the CA 6000 is a single cache shared by multiple clients. The shared cache is not a part of the CA 6000, but is the entire CA 6000.</p>

		<p>software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.</p>	
	<p>(b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there;</p>	<p>The shared cache (NDC) of the CacheFlow 6000 accelerator acting as a client accelerator (NDC client terminator site) checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112. ...If the</p>	<p>NCT has not provided any evidence that that the CA 6000 is an NDC Client Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the CA 6000, where an NDC buffer exists within the CA 6000, or where a projected image exists within the CA 6000.</p>

		<p>web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators ).</p>	
	<p>(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is not the NDC server terminator site for the stored dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site;</p>	<p>If the memory (NDC buffer) for the shared cache of the CacheFlow 6000 accelerator site does not contain a copy (projected image) of all the requested data, and if this accelerator is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this accelerator transmits a request for the requested data downstream to another accelerator (NDC site) that is closer to the server accelerator (NDC server terminator site) for the dataset or to the server accelerator (NDC server terminator site).</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with</p>	<p>NCT has not shown where or how the CA 6000 is an NDC Client Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the CA 6000, where an NDC buffer exists within the CA 6000, or where a projected image exists within the CA 6000.</p> <p>Furthermore, NCT has not identified structure within the accused device that transmits a request <u>downstream</u> to another CA 6000.</p> <p>Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.</p>

		<p>modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache III is unable to server the web object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache III sends a message to the root cache III requesting the web object 133." CF 009278.</p>	
	<p>(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if the NDC site receiving the request is the NDC server terminator site for the stored dataset, the NDC of the NDC server terminator site accessing the stored dataset to project an image of the requested data into the NDC buffer of the NDC server terminator site;</p>	<p>If the memory (NDC buffer) for the shared cache (NDC) of the downstream accelerator (NDC site) does not contain a copy (projected image) of all data requested from the stored dataset, and if the downstream accelerator (NDC site) is the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) of the server accelerator accesses the stored dataset to project an image of the requested data into its memory (NDC buffer).</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to</p>	<p>NCT does not identify any structure within the CA 6000 that can store the "stored dataset" as defined in the asserted patent.</p>



		<p>the web browser." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.</p> <p>...</p> <p>At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112... because there</p>	
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		<p>has a been a root cache miss...</p> <p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111." CF 009278-009279.</p>	
	<p>(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;</p>	<p>The shared cache (NDC) of the server accelerator (NDC server terminator site) for the stored dataset continues to check its memory (buffer) to determine whether it contains a copy (projected image) of all requested data, and if the shared cache (NDC buffer) does not contain a copy of all data requested from the stored dataset, the shared cache (NDC buffer) of the server accelerator (NDC server terminator site) continues to accesses the stored dataset until its memory (NDC buffer) receives a copy of all the requested data.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p>	<p>NCT does not identify any structure within the CA 6000 that stores the "stored dataset" as defined in the asserted patent.</p>

		<p>"Cache flow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p>	
	<p>(f) each successive NDC site, having obtained a projected image of all the requested data, returning the requested data upstream to the NDC site from which the NDC site received the request until the requested data arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site into the second plurality of NDC client terminator sites; and</p>	<p>After the server accelerator (NDC server terminator site) obtains a copy (projected image) of all the requested data, the shared cache (NDC) of the server accelerator sends the data upstream, either directly or through intermediate NDC sites (such as other CacheFlow 6000 accelerators), to the CacheFlow 6000 accelerator acting as the NDC client terminator site. The server accelerator, and any intermediate NDC sites (accelerators), retain a copy of the returned data so that it (they) may subsequently and concurrently transmit a copy of such data to two or more CacheFlow 6000 accelerators acting as client accelerators (NDC client terminator sites).</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p>	<p>NCT does not identify any structure within the CA 6000 that can return requested data upstream to another NDC site.</p> <p>Nor has NCT identified any structure within the CA 6000 that can retain a copy of the returned data.</p> <p>NCT has not identified any structure in the CA 6000 for concurrently projecting images into a plurality of client terminator sites.</p>

		<p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p>	
	(g) the NDC client terminator site, upon receiving the requested data, returning the requested data to the client site that requested access to the stored dataset.	<p>Upon receiving the requested data, the CacheFlow 6000 accelerator acting as the client accelerator (NDC client terminator site) sends the data to the client site that requested it.</p> <p>"...the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p>	
Claim 16	<p>A network of digital computers that includes a first plurality of client sites which request access to a stored dataset that is stored at a location that can be accessed through the network, the network comprising:</p> <p>a second plurality of NDC sites, the stored dataset whose access is requested by the client sites being stored at an NDC server terminator site, a request from the client sites for access to the stored dataset being</p>	<p>CacheFlow infringes this claim under 35 V.S.C. § 271(b) and/or (c).</p> <p>CacheFlow 6000 accelerators are combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers- such as Akamai. Inclusion and operation of the CacheFlow 6000 accelerator by CacheFlow's</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including: A first plurality of NDC sites including an NDC that has an NDC buffer. NCT alleges that a CA 6000 is an NDC site. NCT has not identified any structure within the CA 6000 that is an NDC, nor has NCT identified any structure that is an NDC buffer.</p> <p>NCT alleges that CacheFlow software and hardware create an NDC, but fail to identify with any specificity what hardware and what software within the CacheOS</p>

	<p>received by a third plurality of NDC client terminator sites, each NDC site including:</p>	<p>customers in their networks performs the claimed functions as described below and constitute infringement under 35 V.S.C. § 271(a). The computer network-such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423- comprises two or more computers acting as client sites, which make concurrent requests for data from two or more client accelerators, such as CacheFlow 6000 accelerators. Each CacheFlow 6000 accelerator includes a processor and a memory (See CF 007485) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007482 -CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a CacheFlow 6000 accelerator receiving a request for data, if the accelerator's buffers have such</p>	<p>constitute an NDC.</p> <p>The preamble, requires the NDC client terminator to be in a network with an ND Server Terminator Site. However, NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The CA 6000 never stores the "stored data" that is always on the web server. Thus, the accused product can never be used in the network claimed in the asserted claim.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents relied upon state: CF007485 does not provide a description of a processor or memory within a CA 6000.</p> <p>CF007482-5 does not show the memory of the CA 6000 being allocated as a cache.</p>
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		<p>data, the accelerator transmits the requested data back to the computer-client site(s) and/or other NDC site(s), such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the CacheFlow 6000 accelerator do not have the requested data, the accelerator accesses such data and receives a copy (i.e., projected image) of the data from an accelerator acting as an NDC server terminator site. After obtaining a copy of the requested data, the shared cache can subsequently transmit the data to one or more computers within the network (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000 Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies.... The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CF 009223.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install</p>	
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		<p>behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched performance, manageability, and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of</p>	
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		<p>the 6000 Series accelerators).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators ).</p>	
	(a) an NDC that has an NDC buffer;	<p>A CacheFlow 6000 accelerator has a shared cache (NDC) that includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 007485 (specifying the memory size for each of the 6000 Series accelerators).</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>NCT has not identified structures within the CA 6000 that are buffers as described in the asserted patent. Thus, without identifying any buffer in the CA 6000, NCT's chart does not map a buffer within the CA 6000 to an NDC buffer. Determining what an NDC buffer includes, is a claim construction issue, since an NDC buffer includes a channel, which the CA 6000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the CA 6000 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the CA 6000 that caches information.</p>
	(b) means for the NDC to receive the request to access the stored dataset;	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶ 6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to intercept routine 102 as disclosed in U.S. Patent No. 5,611,049, for performing this</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>



		<p>claimed function.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p>	
	<p>(c) means for the NDC to check the NDC buffer at this NDC site to determine if a projected image of data requested from the stored dataset is already present there, wherein;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶ 6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a projected image of the requested data. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to buffer search routine 126 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"When a web browser accesses a web page, it queries the forward proxy to see if it has already cached the content. If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112.... If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(c)(i) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if this NDC site is not the NDC server terminator site for the stored dataset, the NDC includes means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the stored dataset than the present NDC site;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site, such as another accelerator. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,... because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(c)(ii) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the stored dataset, and if this NDC site is the NDC server terminator site for the stored dataset, the NDC including means for accessing the stored dataset to project an image of the requested data into the buffer of this NDC; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the server accelerator (NDC server terminator site) performs the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This server</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>accelerator incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"Cache flow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,... because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting</p>	
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		the web object 133." CF 009278.	
	<p>(c)(iii) if the NDC buffer of an NDC site contains a projected image of all requested data, the NDC including means for returning the data requested from this NDC site upstream to the NDC site from which this NDC site received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site, each NDC site that returns data upstream to the requesting NDC site retaining a copy of the returned data that the returning NDC site may subsequently transmit to an NDC site other than the NDC site to which the returning NDC site first returned the data, whereby images of the stored dataset may be projected concurrently from a single NDC site into the third plurality of NDC client terminator sites; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of returning the data requested to the upstream accelerator (NDC site) that requested the data. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing claimed function.</p> <p>The memory (NDC buffer) and software of the shared cache (NDC) of the CacheFlow 6000 I accelerator perform the claimed function of retaining a copy of the returned data. The CacheFlow 6000 accelerator includes a pool 128 of buffers 129 and incorporates software, the same as or equivalent to the buffer search routine 126 as disclosed in U.S. Patent No. 5,611,049, for</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p>	
	<p>(d) means for the NDC client terminator site to return the requested data to the client site that requested access to the stored dataset.</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of returning the requested data to the client site. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"...the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p>	<p>NCT makes no showing that the NDC is a shared cache of the CA 6000.</p> <p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

'914 Patent			
Claim 1	<p>In a network of digital computers that includes a plurality of Network Distributed Cache ("NDC") sites, each NDC site including an NDC that has an NDC buffer, a method for projecting an image of a stored dataset from an NDC server terminator site into an NDC client terminator site in response to a request to access such dataset transmitted from a client site to the NDC client terminator site, the method comprising the steps of:</p>	<p>CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c).</p> <p>A CacheFlow 6000 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers- such as Akamai. Operation of the CacheFlow 6000 accelerator by CacheFlow's customers in their network performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423- comprises a computer acting as a client site, which makes a request for data from a client accelerator, such as a CacheFlow 6000 accelerator. A CacheFlow 6000 accelerator includes a processor and a memory (See CF 007485) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including: A first plurality of NDC sites including an NDC that has an NDC buffer. NCT alleges that a CA 6000 is an NDC site. NCT has not identified any structure within the CA 6000 that is an NDC, nor has NCT identified any structure that is an NDC buffer.</p> <p>NCT alleges that CacheFlow software and hardware create an NDC, but fail to identify with any specificity what hardware and what software within the CacheOS constitute an NDC.</p> <p>The preamble, requires the NDC client terminator to be in a network with an ND Server Terminator Site. However, NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The CA 6000 never stores the "stored data" that is always on the web server. Thus, the accused product can never be used in the network claimed in the asserted claim.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents relied upon state: CF007485 does not provide a description of a processor or memory within a CA 6000. CF007482-5 does not show the</p>

		<p>to a number of buffers which form a cache (See CF 007482 - CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a CacheFlow 6000 accelerator receiving a request for data, if the accelerator's buffers have such data, the accelerator transmits the requested data back to the computer-client site and/or other NDC site, such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the CacheFlow 6000 accelerator do not have the requested data, the accelerator accesses such data and receives a copy (i.e., projected image) of the data from an accelerator acting as an NDC server terminator site. After obtaining a copy of the requested data, the shared cache transmits the data to the requesting computer - client site or another NDC site, such as another accelerator-within the network (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000</p>	<p>memory of the CA 6000 being allocated as a cache.</p>
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		<p>Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies.... The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CF 009223.</p> <p>A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that</p>	
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		<p>can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched performance, manageability, and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators ).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators).</p>	
	(a) the NDC receiving the request to access data in the stored dataset;	<p>The shared cache (NDC) of the CacheFlow 6000 accelerator acting as a client accelerator (NDC client terminator site) receives a request to access data in a stored dataset.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware</p>	<p>NCT has not identified the structure of an NDC within the CA 6000.</p> <p>NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base their mapping on, clearly shows that the CA 6000 is a single cache shared by multiple clients. The shared cache is not a part of the CA 6000, but is the entire CA 6000.</p>

		<p>configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.</p>	
	<p>(b) the NDC checking the NDC buffer at this NDC site to determine if a projected image of data requested from the dataset is already present there;</p>	<p>The shared cache (NDC) of the Cache Flow 6000 accelerator acting as a client accelerator (NDC client terminator site) checks its memory (NDC buffer) to determine whether it has a copy (projected image) of the requested data.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112.... If the web object 133 is present, the method</p>	<p>NCT has not provided any evidence that that the CA 6000 is an NDC Client Terminator Site.</p> <p>NCT does not identify any structure within the CA 6000 that can store the "stored dataset" as defined in the asserted patent.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the CA 6000, where an NDC buffer exists within the CA 6000, or where a projected image exists within the CA 6000.</p>

		<p>200 proceeds with the next step." CF 009278.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p>	
	<p>(c) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is not the NDC server terminator site for the dataset, the NDC of this NDC site transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the dataset than the present NDC site;</p>	<p>If the memory (NDC buffer) for the shared cache of the CacheFlow 6000 accelerator site does not contain a copy (projected image) of all the requested data. and if this accelerator is not the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) for this accelerator transmits a request for the requested data downstream to another accelerator (NDC site) that is closer to the server accelerator (NDC server terminator site) for the dataset or to the server accelerator (NDC server terminator site).</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched</p>	<p>NCT has not shown where or how the CA 6000 is an NDC Client Terminator Site.</p> <p>NCT does not identify any structure within the CA 6000 that stores the "stored dataset" as defined in the asserted patent.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the CA 6000, where an NDC buffer exists within the CA 6000, or where a projected image exists within the CA 6000.</p> <p>Furthermore, NCT has not identified structure within the accused device that transmits a request <u>downstream</u> to another CA 6000.</p> <p>Nor does NCT identify a structure within the accused device for transmitting to another NDC site closer to the NDC server terminator site for the stored dataset.</p>

		<p>performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(d) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if the NDC site receiving the request is the NDC server terminator site for the dataset, the NDC of this NDC site accessing the stored dataset to project an image of the requested data into its NDC buffer;</p>	<p>If the memory (NDC buffer) for the shared cache (NDC) of the downstream accelerator (NDC site) does not contain a copy (projected image) of all data requested from the stored dataset, and if the downstream accelerator (NDC site) is the server accelerator (NDC server terminator site) for the stored dataset, the shared cache (NDC) of the server accelerator accesses the stored dataset to project an image of the requested data into its memory (NDC buffer).</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p>	<p>NCT does not identify any structure within the CA 6000 that can return requested data upstream to another NDC site.</p> <p>Nor has NCT identified any structure within the CA 6000 that can retain a copy of the returned data.</p> <p>NCT has not identified any structure in the CA 6000 for concurrently projecting images into a plurality of client terminator sites.</p>

		<p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 223, similar to step 213, the root cache 111 determines if the web object 133 is present in its memory or storage 112. In a preferred embodiment, the root cache 111 makes this determination in response to the URL for the selected web object 133 included in the request from the client device 120. If the web object 133 is present, the method 200 proceeds with the next step. If the web object 13 is not present, the method 200 proceeds with the flow point 230.</p> <p>....</p> <p>At a flow point 230, the root cache 111 is unable to transmit the web object 133 from its memory or storage 112...because there has a been a root cache miss...</p>	
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		<p>At a step 231, similar to step 211, the root cache sends a message to the indicated server device 130 requesting the web object 133.</p> <p>At a step 232, the server device 130 transmits the web object 133 to the root cache 111," CF 009278-009279.</p>	
	<p>(e) repeating the steps (a) through (d) until the NDC buffer of the downstream NDC site receiving the request contains a projected image of all requested data;</p>	<p>The shared cache (NDC) of the server accelerator (NDC server terminator site) for the stored dataset continues to check its memory (buffer) to determine whether it contains a copy (projected image) of all requested data, and if the shared cache (NDC buffer) does not contain a copy of all data requested from the stored dataset, the shared cache (NDC buffer) of the server accelerator (NDC server terminator site) continues to access the stored dataset until its memory (NDC buffer) receives a copy of all the requested data.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"Cacheflow Internet Appliances can be</p>	<p>NCT has not identified the structure of an NDC within the CA 6000.</p> <p>NCT is under the false belief that the "shared cache" referred to in CacheFlow marketing literature is an NDC. However, the literature upon which they base their mapping on, clearly shows that the CA 6000 is a single cache shared by multiple clients. The shared cache is not a part of the CA 6000, but is the entire CA 6000.</p>

		deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.	
	(f) each successive NDC site, having obtained a projected image of all the requested data, returning data requested from it upstream to the NDC site from which it received the request until the requested data arrives at the NDC client terminator site; and	<p>After the server accelerator (NDC server terminator site) obtains a copy (projected image) of all the requested data, the shared cache (NDC) of the server accelerator sends the data upstream, either directly or through intermediate NDC sites (such as other CacheFlow 6000 accelerators), to the CacheFlow 6000 accelerator acting as the NDC client terminator site. The server accelerator, and any intermediate NDC sites (accelerators), retain a copy of the returned data.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p>	<p>NCT has not provided any evidence that that the CA 6000 is an NDC Client Terminator Site.</p> <p>Furthermore, NCT has failed to meet the specificity requirement of L.R. 3-1 by not identifying the structures: where an NDC exists within the CA 6000, where an NDC buffer exists within the CA 6000, or where a projected image exists within the CA 6000.</p>
	(g) the NDC client terminator site, upon receiving the requested data, returning the requested data to the	Upon receiving the requested data, the CacheFlow 6000 accelerator acting as the client accelerator	



	client site.	(NDC client terminator site) sends the data to the client site that requested it. "...the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.	
Claim 9	A network of digital computers that includes a client site which requests access to a dataset that is stored at a location that can be accessed through the network, the network comprising:	<p>CacheFlow infringes this claim under 35 U.S.C. § 271(b) and/or (c).</p> <p>A CacheFlow 6000 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers- such as Akamai. Inclusion and operation of the CacheFlow 6000 accelerator by CacheFlow's customers in their network performs the claimed functions as described below and constitute infringement under 35 U.S.C. § 271(a). The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423-comprises a computer acting as a client site, which makes a request for data from a client accelerator, such as a CacheFlow 6000 accelerator. A</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including:</p> <p>An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a CA 6000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The CA 6000 never stores the "stored data" that is always on the web server.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents relied upon state: CF007493 does not provide a description of a processor or memory within a CA 6000.</p> <p>CF007490-3 does not show the memory of the CA 6000 being allocated as a cache.</p>

		<p>CacheFlow 6000 accelerator includes a processor and a memory (See CF 007485) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007482 -CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which in combination with the memory create an NDC that operates as a shared cache (See CF 007456). Upon a CacheFlow 6000 accelerator receiving a request for data, if the accelerator's buffers have such data, the accelerator transmits the requested data back to the computer-client site and/or other NDC site, such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the CacheFlow 6000 accelerator do not have the requested data, the accelerator accesses such data and receives a copy (i.e., projected image) of the data from an accelerator acting as an NDC server terminator site. After obtaining a copy of the requested data, the shared cache transmits the data to the requesting</p>	
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		<p>computer- client site or another NDC site, such as another accelerator-within the network (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000 Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies.....The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CF 009223.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched</p>	
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		<p>performance, manageability, and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators).</p>	
	<p>a plurality of NDC sites, the dataset whose access is requested by the client site being stored at an NDC server terminator site, a request from the client site for access to the dataset being received by an NDC client terminator site, each NDC site including:</p>	<p>A CacheFlow 6000 accelerator is combined in a computer network of its customers, such as internet service providers, broadband service providers, or network providers- such as Akamai. The computer network- such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423--comprises a computer acting as a client site, which makes a request for data from a client accelerator, such as a CacheFlow 6000 accelerator. A CacheFlow 6000 accelerator includes a processor and a memory (See CF 007485) configured to be a Network Distributed Cache ("NDC") site. A portion of the memory is allocated to a number of buffers which form a</p>	<p>There is no support for the assertion that a CA 6000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. The server terminator site is the owner of the "original data," not a projected image as stated in NCT's chart.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers.</p>

		<p>cache (See CF 007482 -CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which in combination with the memory create an NDC that operates as a shared cache (See CF 007456).</p> <p>Upon a CacheFlow 6000 accelerator receiving a request for data, if the accelerator's buffers have such data, the accelerator transmits the requested data back to the computer-client site and/or other NDC site, such as another accelerator- that requested it (See CF 007456). Otherwise, if the buffers within the CacheFlow 6000 accelerator do not have the requested data, the accelerator accesses such data and receives a copy (i.e., projected image) of the data from an accelerator acting as an NDC server terminator site. After obtaining a copy of the requested data, the shared cache transmits the data to the requesting computer- client site or another NDC site, such as another accelerator-within the network (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000 Series consists of high performance</p>	
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		<p>content delivery solutions for enterprises, ISPs, educational institutions and government agencies...The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CF 009223.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cache flow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache</p>	
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		<p>acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched performance, manageability, and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators).</p>	
	(a) an NDC that has an NDC buffer;	<p>A CacheFlow 6000 accelerator has a shared cache (NDC) that includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 007497 (specifying the memory size for each of the 6000 Series accelerators).</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including: A first plurality of NDC sites including an NDC that has an NDC buffer. NCT alleges that a CA 6000 is an NDC site. NCT has not identified any structure within the CA 6000 that is an NDC, nor has NCT identified any structure that is an NDC buffer.</p> <p>NCT alleges that CacheFlow software and hardware create an NDC, but fail to identify with any specificity what hardware and what software within the CacheOS constitute an NDC.</p> <p>The preamble, requires the NDC client terminator to be in a network with an ND Server Terminator Site. However, NCT has not shown that an accelerator can be an NDC</p>

			<p>Server Terminator Site. According to the preamble, the server terminator site stores the “stored data” which is the original data normally found on a web server. The CA 6000 never stores the “stored data” that is always on the web server. Thus, the accused product can never be used in the network claimed in the asserted claim.</p> <p>NCT ignores Figures 2 and 3 of CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents relied upon state: CF007485 does not provide a description of a processor or memory within a CA 6000.</p> <p>CF007482-5 does not show the memory of the CA 6000 being allocated as a cache.</p>
	(b) means for the NDC to receive the request to access the dataset;	<p>This claim element is subject to interpretation under 35 C.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to intercept routine 102 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"When a browser</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>NCT has not identified structures within the CA 6000 that are buffers as described in the asserted patent. Thus, without identifying any buffer in the CA 6000, NCT's chart does not map a buffer within the CA 6000 to an NDC buffer. Determining what an NDC buffer includes, is a claim construction issue, since an NDC buffer includes a channel, which the CA 6000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the CA 6000 is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the CA 6000 that caches information.</p>



		accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.	
	(c) means for the NDC to check the NDC buffer at this NDC site to determine if a projected image of data requested from the dataset is already present there wherein	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a projected image of the requested data. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to buffer search routine 126 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the data. If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112....If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(c)(i) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if this NDC site is not the NDC server terminator site for the dataset, the NDC including means for transmitting a request for data from this NDC site downstream to another NDC site closer to the NDC server terminator site for the dataset than the present NDC site;</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site, such as another accelerator. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"Cache flow Internet</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(c)(ii) if the NDC buffer of this NDC site does not contain a projected image of all data requested from the dataset, and if this NDC site is the NDC server terminator site for the dataset, the NDC including means for accessing the dataset to project an image of the requested data into its NDC buffer; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the server accelerator (NDC server terminator site) performs the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This server accelerator incorporates software, the same</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"CacheFlow Internet Appliance can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	(c)(iii) if the NDC buffer of an NDC site contains	This claim element is subject to	This element is a means plus function claim element that NCT

	<p>a projected image of all requested data, the NDC including means for returning data requested from it upstream to the NDC site from which it received the request, whereby through a succession of such returns of data from one NDC site to the next upstream NDC site the requested data ultimately arrives at the NDC client terminator site; and</p>	<p>interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of returning the data requested to the upstream accelerator (NDC site) that requested the data. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p>	<p>maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines<sup>112</sup> described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
	<p>(d) data return means for returning the requested data from the NDC client terminator site to the client site.</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted</p>

		<p>shared cache (NDC) of the CacheFlow 6000 accelerator performs the claimed function of returning the requested data to the client site. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"...the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p>	<p>claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
'452 Patent			
Claim 13	<p>A Network Distributed Cache ("NDC") site adapted for inclusion into a network of digital computers, the network including a client terminator site that is adapted for receiving a request from a client for access to data stored in a dataset located at a server terminator site, the server terminator site also being included in the network and being accessible by the client terminator site via the network, the NDC site comprising:</p>	<p>CacheFlow's manufacture and sales of its 6000 accelerators infringes this claim under 35 U.S.C. § 271(a).</p> <p>A CacheFlow 6000 accelerator is a Network Distributed Cache ("NDC") site that is adapted for inclusion into its customers' computer networks, such as those operated by internet service providers, broadband service providers, or network provider- such as Akamai. The accelerator is adapted to be included within a computer network-</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>The preamble identifies a network of digital computers, including:</p> <p>An NDC Server Terminator Site (storing a stored data set) There is no support for the assertion that a CA 6000 can be configured to be a <u>NDC</u> site. There is no support that CacheFlow software and hardware create an NDC.</p> <p>NCT has not shown that an accelerator can be an NDC Server Terminator Site. According to the preamble, the server terminator site stores the "stored data" which is the original data normally found on a web server. The CA 6000 never stores the "stored data" that is always on the web server.</p> <p>NCT ignores Figures 2 and 3 of</p>

		<p>such as those shown in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423-, which in addition to the CacheFlow 6000 accelerator comprises a computer acting as client site that requests data from the CacheFlow 6000 accelerator. A CacheFlow 6000 accelerator includes a processor and a memory (See CF 007485) configured to be an NDC site. A portion of the memory is allocated to a number of buffers which form a cache (See CF 007482 -CF 007485). The CacheFlow 6000 accelerator further includes computer programs (See CF 007484), which together with the cache create an NDC. The CacheFlow 6000 accelerator is configured such that upon receiving a request for data, the computer programs in the accelerator checks whether the buffers have such data. If so, the accelerator is configured to transmit the requested data back to the requesting computer-client site and/or other NDC site, such as another</p>	<p>CF007472 (Caching Deployment Guide), which shows that CacheFlow Accelerators are connected to the network through L4 switches and Routers, not directly to the network.</p> <p>NCT misrepresents what the documents relied upon state: CF007493 does not provide a description of a processor or memory within a CA 6000.</p> <p>CF007490-3 does not show the memory of the CA 6000 being allocated as a cache.</p>
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		<p>accelerator (See CF 007456). Otherwise, if the buffers do not have the requested data, the accelerator is configured to access such data from a downstream NDC site, such as another accelerator, or from an accelerator acting as an NDC server terminator site (See CF 007456).</p> <p>"CacheFlow Client Accelerators 6000 Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies....The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content." CF 009223</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472</p>	
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		<p>and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators).</p>	
	(a) an NDC having an NDC buffer and including;	<p>A CacheFlow 6000 accelerator has an NDC that includes a memory, which comprises a buffer, wherein copies of cached data may be stored and which is checked to determine whether cached data is stored therein.</p> <p>See CF 007485 (specifying the memory size for each of the four models of the 6000 Series accelerators).</p>	<p>NCT fails to meet the specificity requirements of L.R. 3-1 for many reasons.</p> <p>NCT has not identified structures within the CA 6000 that are buffers as described in the asserted patent. Thus, without identifying any buffer in the CA 6000, NCT's chart does not map a buffer within the CA 6000 to an NDC buffer. Determining what an NDC buffer includes, is a claim construction issue, since an NDC buffer includes a channel, which the CA 6000 does not have.</p> <p>Furthermore, NCT asserts that the RAM contained within the CA 6000</p>

			is the NDC buffer which stores a projected image, however, the RAM does not store cached data, it is a magnetic disk within the CA 6000 that caches information.
	(a)(i) means for receiving requests for access to data stored in a dataset; and	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 6000 accelerator performs the claimed function of receiving a request to access a stored dataset. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to intercept routine 102 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the intercept routine 102 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>
	(a)(ii) means for the NDC to check the NDC buffer to determine when a projected image of valid data responsive to at least a portion of requests therefor is already present in the NDC buffer wherein:	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 6000 accelerator performs the claimed function of checking its memory (NDC buffer) to determine whether the memory has a copy (projected image) of a portion of the requested data. The CacheFlow 6000</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>accelerator incorporates software, the same as or equivalent to buffer search routine 126 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112....If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p>	
	<p>(a)(ii)(A) if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is not the server terminator site for the dataset, the NDC including means for transmitting a request for data via the network from the NDC site downstream to another site closer to the server</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 6000 accelerator performs the claimed function of transmitting a request for data downstream to another NDC site,</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the request director routine 144 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed</p>

	<p>terminator site for the dataset than the NDC site;</p>	<p>such as another accelerator. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to request director routine 144 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See a/so CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a</p>	<p>function.</p>
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		message to the root cache 111 requesting the web object 133." CF 009278.	
	(a)(ii)(B) if the NDC buffer does not contain a projected image of all data requested from the dataset, and if the NDC site is the server terminator site for the dataset, the NDC including means for accessing the dataset to project a valid image of the requested data into the NDC buffer;	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the server accelerator (NDC server terminator site) performs the claimed function of accessing the stored dataset to project an image of the requested data into its memory (NDC buffer). This server accelerator incorporates software, the same as or equivalent to file system interface routines 112 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the file system interface routines 112 described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a flow point 220, the leaf cache 111 is unable to server the web object 133 from its memory or storage 112,...because there has been a leaf cache miss...</p> <p>At a step 221, similar to step 211, the leaf cache 111 sends a message to the root cache 111 requesting the web object 133." CF 009278.</p>	
	<p>(a)(ii)(C) if the NDC buffer contains a projected image of all requested data, and if the NDC site is not the client terminator site which received the request from the client, the NDC including means for returning data requested from the NDC site upstream to the site from which the NDC received the request, whereby through a succession of such returns of data from one site to the next upstream site the requested data ultimately arrives at the client terminator site; and</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 6000 accelerator performs the claimed function of returning the data requested to the upstream accelerator (NDC site) that requested the data. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the buffer search routine 126 and client intercept routines 102 or the buffer search routine 126 and server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not</p>	<p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the buffer search routine 126, client intercept routines 102, or the buffer search routine 126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		<p>already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. See also CF 007446, CF 007472 and CF 007423.</p>	
	<p>(a)(ii)(D) if the NDC buffer contains a valid projected image of all requested data, and if the NDC site is the client terminator site which received the request from the client, the NDC including data return means for returning the requested data from the NDC buffer to the client site.</p>	<p>This claim element is subject to interpretation under 35 U.S.C. § 112, ¶6.</p> <p>The software of the NDC of the CacheFlow 6000 accelerator performs the claimed function of returning the requested data to the client site. The CacheFlow 6000 accelerator incorporates software, the same as or equivalent to the client intercept routines 102 or server interface routines 104 as disclosed in U.S. Patent No. 5,611,049, for performing this claimed function.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use. The next time a user attempts to load</p>	<p>NCT makes no showing that the NDC is a shared cache of the CA 6000.</p> <p>This element is a means plus function claim element that NCT maps to CacheFlow's CacheOS software. NCT has not shown any corresponding physical structure to the "means" stated in the asserted claim, but instead indicates that the means is the client intercept routines 102, or the buffer search routine126, and server interface routines 104, described in the asserted patents. NCT fails to satisfy the specificity requirements of L.R. 3-1, without identifying what subroutine within the CacheOS software performs the claimed function.</p>

		the same web pages, the proxy will deliver the content from cache." CF 007456.	
'234 Patent			
Claim 1	A network-infrastructure cache for providing proxy services to a plurality of client workstations concurrently requesting access to data stored on a server; the client workstations and the server being interconnected by a network via which client workstations may transmit network-file-services-protocol requests to the server, and via which the server transmits network-file-services-protocol responses to requesting client workstations; the network- infrastructure cache comprising:	<p>CacheFlow's manufacture and sales of its 6000 accelerators infringes this claim under 35 U.S.C. § 271(a).</p> <p>A CacheFlow 6000 accelerator includes hardware (See CF 007485) and software (See CF 007484) configured to be a network-infrastructure cache ("NI Cache"). The hardware includes memory (See CF 007484), a portion of which serves as a cache (See CF 007482 -CF 007485) that stores cached data. The software of the accelerator configures the cache to be a proxy cache (See CF 007456) for a plurality of client workstations-as illustrated in Figure 3 on page CF 005949, Figure 2 on NCT 012478, the Figure on CF 007483, Figure 2 on CF 007446 and Figure 3 on CF 007423. The CacheFlow 6000 accelerator is configured such that upon receiving a request for data, in a network-file-services protocol (See CF 007484 and CF 007458), from a computer such as a client workstation, the computer programs</p>	



		<p>in the accelerator check whether the proxy cache has a copy of the requested data. If so, the CacheFlow 6000 accelerator is configured to transmit the requested data back to the computer that requested it (See CF 007456). Otherwise, if the proxy cache does not have the requested data, the accelerator is configured to transmit a network-file-services protocol request for the requested data missing from the proxy cache, via the network, to a server (See CF 007456). The accelerator is also configured to receive a network-file-services protocol response via the network, wherein the response includes the missing data (See CF 007456). The accelerator is also configured to store such data in the proxy cache (See CF 007456).</p> <p>CacheFlow Client Accelerators 6000 Series consists of high performance content delivery solutions for enterprises, ISPs, educational institutions and government agencies....The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and</p>	
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		<p>multimedia content." CF 009223.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"Cacheflow Internet Appliances can be deployed hierarchically." CF 007416. <i>See also</i> CF 007446, CF 007472 and CF 007423.</p> <p>"An ICP cache hierarchy is comprised of a group of caches with defined parent and sibling relationships. A cache parent is a cache that can return the object if it is in the cache, or request the object from the source on behalf of the requester if the object is not in the cache. A cache sibling is a cache that can only return the object if it is in the cache. One cache acting as a parent can also act as a sibling to other caches." CF 008097.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to</p>	
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		<p>deliver unmatched performance, manageability, and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p> <p>See CF 007485 (specifying the different disk drives for each of the four models of the 6000 Series accelerators).</p>	
	<p>a network interface that connects to the network for providing a hardware and software interface to the network through which the network-infrastructure cache receives and responds to network-file-services-protocol requests from client workstations for data for which the network-infrastructure cache provides proxy services;</p>	<p>The CacheFlow 6000accelerator includes hardware and software, and the hardware includes a memory, a portion of which serves as a cache for storing cached data. The software configures the cache to be a proxy cache for a plurality of workstations such that the cache may be checked to determine if cached data is present. The hardware and software of the proxy cache include an interface, the same as or equivalent to network interface 102, that allows it to receive and respond to network-file-protocol requests from a plurality of client workstations.</p> <p>"The CA-6000 is deployed between users and the Internet, and intelligently manages requests for Web and multimedia content."</p>	<p>NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the CA 6000.</p>

		<p>CF 009223.</p> <p>"The appliance can be configured in either Proxy or Transparent mode. In Proxy mode, browsers connect directly with the CacheFlow." CF 007423.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that...will cache frequently accessed content and deliver the content to the web browsers upon request." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configurations to deliver unmatched performance, manageability, and scalability." CF 007484.</p>	
	<p>a file-request service-module for receiving via said network interface network -file- services-protocol requests transmitted by the client workstations for data for which the network-infrastructure cache provides proxy services, and for transmitting to client workstations via said network interface network-file- services-protocol responses to the network- file-services- protocol requests;</p>	<p>A CacheFlow 6000 accelerator includes software, the same as or equivalent to the service- module 112, for receiving network-file-services-protocol requests from and for transmitting network interface network -file- services-protocol responses to client workstations.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that...will cache frequently accessed</p>	<p>NCT has not provided a single authority to support this allegation. NCT has not identified a structure within the file-request service module within the CA 6000.</p>

		<p>content and deliver the content to the web browsers upon request. When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content. If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456.</p> <p>"In Proxy mode, browsers connect directly with the CacheFlow." CF 007423.</p> <p>"When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>"At a step 211, one of the client devices 120 sends a message to its associated leaf cache 111 requesting a selected web object 133." CF 009277.</p> <p>"...the proxy retrieves the content from the web site and delivers it to the web</p>	
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		browser." CF 007456.	
	a cache from which said file- request service-module retrieves data that is included in the network- file-services- protocol responses that said file- request service-module transmits to the client workstations; and	<p>The CacheFlow 600accelerator includes hardware and software, and the hardware includes memory, a portion of which serves as a cache, that stores cached data. The software configures the cache to be a proxy cache for a plurality of workstations.</p> <p>"A forward proxy, such as CacheFlow's Edge Accelerator, is a shared cache that organizations install behind their firewall. A forward proxy will cache frequently accessed content and deliver the content to the web browsers upon request. When a browser accesses a web page, it queries the forward proxy to see if it has already cached the content. If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser." CF 007456."</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p>	NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the CA 6000.

		<p>"At a step 213, the leaf cache 111 determines if the web object 133 is present in its memory or storage 112....If the web object 133 is present, the method 200 proceeds with the next step." CF 009278.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p>	
	<p>a file-request generation- module for transmitting to the server via said network interface network -file-services-protocol requests for data specified in network-file- services-protocol requests received by said file-request service-module that is missing from said cache, for receiving from the server network-file-services-protocol responses that include data missing from said cache, and for transmitting such missing data to said cache for storage therein.</p>	<p>The CacheFlow 6000 accelerator includes software, the same as or equivalent to the request- module 132, for transmitting a network-file-services-protocol request for data, missing from the cache, to a downstream accelerator or the server, for receiving the missing data, and for transmitting the missing data to the cache.</p> <p>"If the content is not already in the forward proxy's cache, the proxy retrieves the content from the web site and delivers it to the web browser. The proxy then stores the content for future use. The next time a user attempts to load the same web page, the proxy will deliver the content from cache." CF 007456.</p> <p>"The CA-6000 Series combines the patent-pending CacheOS™ software with</p>	<p>NCT has not provided a single authority to support this allegation. NCT has not identified a structure that is a network interface within the CA 6000.</p>

		<p>modular hardware configured to deliver unmatched performance, flexibility and scalability." CF 007484.</p> <p>See CF 007485 (specifying the size of the RAM for each of the 6000 Series accelerators).</p>	
Claim 2	The network-infrastructure cache of claim 1 wherein client workstations transmit network-file-services-protocol requests using Hyper-Text Transfer Protocol ("HTTP").	<p>The client workstations transmit network-file-services-protocol requests to the CacheFlow 6000 accelerator using HyperText Transfer Protocol ("HTTP")</p> <p>"Protocol (HTTP, TCP/IP)" CF 005953/</p>	NCT has not identified any structure within the CA 6000 that receives requests from a client workstation that transmits requests using HTTP.
Claim 3	3. The network-infrastructure cache of claim 1 wherein the server transmits network-file-services-protocol responses using HTTP .	<p>The server transmits network-file-services-protocol responses to the CacheFlow 6000 accelerator using HTTP.</p> <p>"Protocol (HTTP, TCP/IP)" CF 005953.</p>	NCT has not identified any structure within the CA 6000 receives responses from a server that transmits responses using HTTP.